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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,850	04/13/2001	Ulrich Zimmermann	113737.6	2752

7590

04/02/2004

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EXAMINER

NAFF, DAVID M

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/762,850	Applicant(s) ZIMMERMANN ET AL.	
	Examiner David M. Naff	Art Unit 1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004 and 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-42, 52 and 56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-42, 52 and 56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is supplemental to the office action of 2/6/04 to respond to a supplemental reply of 1/29/04 containing a 37 C.F.R. 1.132 Declaration of Dr. Frank Thurmer, and to an Information Disclosure Statement filed 3/19/04.

The declaration fails to overcome the 35 USC 103 rejection in the office action of 2/6/04.

The declaration asserts that in the present invention the first step is dissolving alginate bound by multivalent cations from plant material by using a complexing agent having a higher affinity for the multivalent cations than the alginate. It is pointed out that this is different from Klock et al where the starting material is dissolved sodium alginate, and barium chloride is added to form barium alginate particles.

This argument is unpersuasive. The claims do not require contacting the complexing agent directly with plant algae without prior formation of sodium alginate and barium alginate particles, and this is not required in the specification. The specification discloses that the raw algae material can be commercial alginate. Commercial alginate is normally sodium alginate produced from algae by treating algae with alkali. The commercial sodium alginate will not contain multivalent cations for removal by the complexing agent. To provide the multivalent

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cations, the sodium alginate would need to be converted to barium alginate and then contacted with the complexing agent to remove the barium ions as disclosed by Klock et al. The barium alginate particles of Klock et al can be considered to be raw algae material since the particles must be purified and then converted to sodium alginate. Klock et al treat the barium alginate particles by steps as required by the present claims. Additionally, when adding sodium EDTA as set forth in the declaration (third page), the EDTA may be functioning only to supply sodium ions to form sodium alginate that is soluble. Since sodium alginate is normally formed by treating algae with alkali in the absence of EDTA where sodium ions of the alkali do not displace multivalent cations in forming sodium alginate, it is not seen how plant algae will contain sufficient naturally present multivalent cations for removal by EDTA to make the plant algae soluble as asserted in the declaration.

The rejections under 35 U.S.C. 112 and 103 in the previous office action of 2/6/04 are maintained.

The three month period for response to the office action of 2/6/04 is restated to begin from the mailing date of this supplemental action.

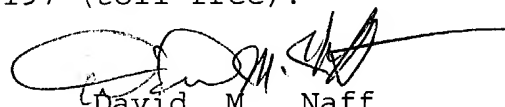
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M.

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Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David M. Naff
Primary Examiner
Art Unit 1651